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## ABSTRACT OF THE DISCLOSURE

Four channel signals (3a-3d) are input into a transmitter unit (1). The channel signal (3a) includes ATM cell-base flow, and is input into a channel identifier adding circuit (4), in which a HEC byte in PLOAM cell is inverted. As a result, the channel signal (3a) is turned into a reference channel signal (3x). The reference channel signal (3x) as well as the channel signals (3b-3d) is input into a multiplexing circuit (5), in which the reference channel signal (3x) is time-division multiplexed in every bit. multiplexed reference channel signal is transmitted as a time-division multiplexed transmission signal (6) to a channel identifying circuit (8) in a receiver unit (7), and then, is separated into channels. The channel identifying circuit (8) detects the reference channel signal among the four channel signals, based on the fact that HEC byte in PLOAM cell is inverted, and identifies other channel signals, based on a difference in a phase between the reference channel signal (3x) and other channel signals. The thus identified channel signals are transmitted from the channel identifying circuit (8).

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20 (Drawing to be published: Fig. 1)





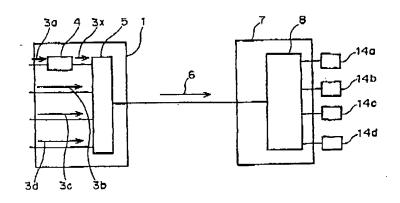
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TIME DIVISION MULTIPLEX TRANSMISSION SYSTEM, AND COMMUNICATION SYSTEM USING TIME DIVISION MULTIPLEX TRANSMISSION ACCESS METHOD (54) Title:

時分割多重伝送システム及び時分割多重アクセス方式を用いた通信システム (54)発明の名称



(57) Abstract

Four channel signals (3a to 3d) are inputted into a transmitter (1). The channel signal (3a) is an ATM cell base flow and inputted into a channel identifier adding circuit (4). The HEC byte of PLOAM of the signal is inverted to generate a reference channel signal (3x). The reference channel signal (3x) is inputted into a multiplexing circuit (5) together with the channel signals (3b to 3d). The signals are subjected to time division bit multiplexing to generate a time division multiplex transmission signal (6), which is sent to a channel identifying circuit (8) of a receiver (7) and separated to signals for respective channels. The channel identifying circuit (8) detects the reference channel signal (3x) from the four channel signals based on the inversion of the HEC byte of the PLOAM cell and identifies all the channel signals based on the phase differences from that of the reference channel signal (3x). The identified channel signals are outputted from the channel identifying circuit (8).

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